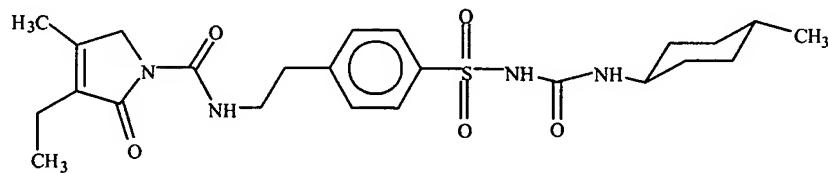


IN THE CLAIMS

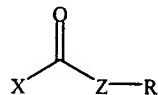
Please cancel claims 1-31. Please add the following new claims :

32) (new) A process for the preparation of *trans*-3-Ethyl-2,5-dihydro-4-methyl-N-[2-[4-  
5 [[[[(4-methylcyclohexyl)amino]carbonyl]amino]sulfonyl]phenyl]ethyl]- 2-oxo-1*H*-pyrrole-1-  
carboxamide, a compound of the formula 1,



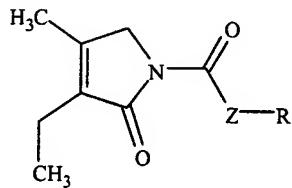
**Formula 1**  
comprising,

10 a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,

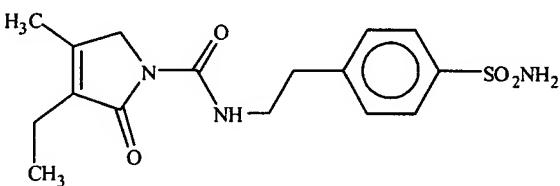


**Formula 2**

to obtain a compound of formula 3,



b) reacting a compound of formula 3 with 4-(2-Aminoethyl)benzene sulfonamide to obtain 4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene sulfonamide, a compound of formula 4,



5

**Formula 4**

c) and further reacting the compound of formula 4 with *trans*-4-methylcyclohexyl

isocyanate to obtain the compound of formula 1,

wherein,

X is halogen, nitroaryl or haloaryl,

10

Z is O, S or NY, wherein Y is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl, aryl or aralkyl, and

R is aryl or heteroaryl, where aryl or heteroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R<sup>1</sup>, SR<sup>2</sup>, SO-R<sup>3</sup> and SO<sub>2</sub>-R<sup>4</sup>,

R<sup>1</sup> is H, C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-alkoxy or C<sub>2</sub>-C<sub>5</sub>-alenoxy,

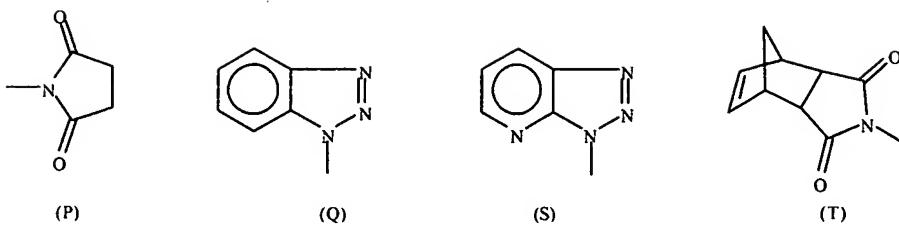
15

R<sup>2</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

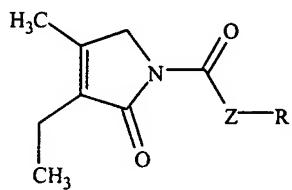
R<sup>3</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl, or

the moiety represented below by P, Q, S or T.



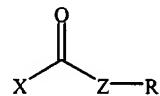
33) (new) A process for the preparation of a compound of formula 3,



**Formula 3**

5

comprising reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,



**Formula 2**

10

wherein,

X is halogen, nitroaryl or haloaryl,

Z is O, S or NY, wherein Y is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl, aryl or aralkyl, and

R is aryl or heteroaryl, where aryl or heteroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R<sup>1</sup>, SR<sup>2</sup>, SO-R<sup>3</sup> and SO<sub>2</sub>-R<sup>4</sup>,

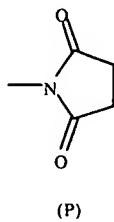
R<sup>1</sup> is H, C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-alkoxy or C<sub>2</sub>-C<sub>5</sub>-alenoxy,

5 R<sup>2</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

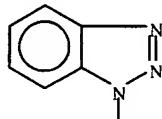
R<sup>3</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl, or

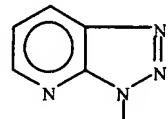
the moiety represented below by P, Q, S or T.



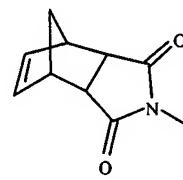
(P)



(Q)

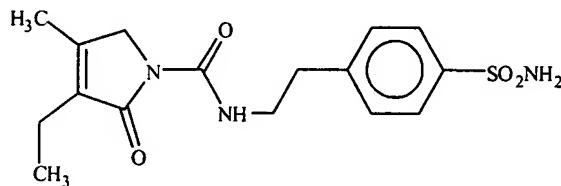


(S)



(T)

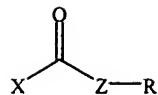
10 34) (new) A process for the preparation of a compound of formula 4,



**Formula 4**

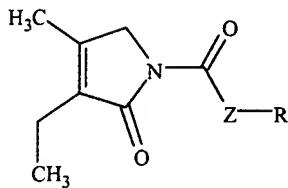
comprising

a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,



**Formula 2**

to obtain a compound of formula 3,



**Formula 3**

5

b) reacting a compound of formula 3 with 4-(2-Aminoethyl)benzene sulfonamide to obtain 4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene sulfonamide, a compound of formula 4,

wherein,

10

X is halogen, nitroaryl or haloaryl,

Z is O, S or NY, wherein Y is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl, aryl or aralkyl and

R is aryl or heteroaryl, where aryl or heteroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R<sup>1</sup>, SR<sup>2</sup>, SO-R<sup>3</sup> and SO<sub>2</sub>-R<sup>4</sup>,

15

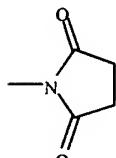
R<sup>1</sup> is H, C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-alkoxy or C<sub>2</sub>-C<sub>5</sub>-alenoxy,

R<sup>2</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

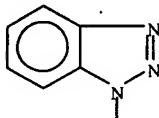
R<sup>3</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl, or

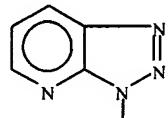
the moiety represented below by P, Q, S or T.



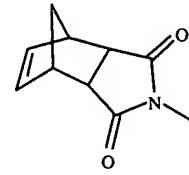
(P)



(Q)

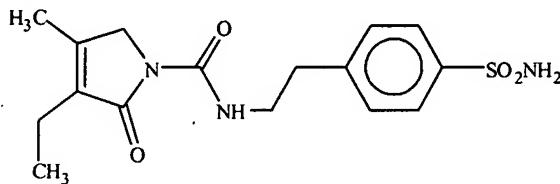


(S)



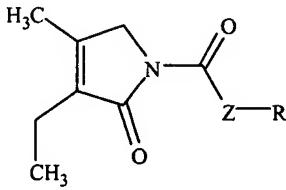
(T)

5 35) (new) A process for the preparation of a compound of formula 4,



**Formula 4**

comprising reacting a compound of formula 3



10

**Formula 3**

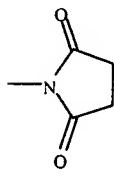
with 4-(2-Aminoethyl)benzene sulfonamide to obtain 4-[2-(3-Ethyl-4-methyl-2-carbonylpyrrolidine amido)ethyl]benzenesulfonamide, a compound of formula 4,

wherein,

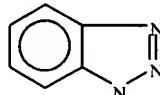
Z is O, S or NY, wherein Y is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl, aryl or aralkyl and  
R is aryl or heteroaryl, where aryl or heteroaryl radical is unsubstituted or substituted by  
one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl,  
CO-R<sup>1</sup>, SR<sup>2</sup>, SO-R<sup>3</sup> and SO<sub>2</sub>-R<sup>4</sup>,

5      R<sup>1</sup> is H, C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-alkoxy or C<sub>2</sub>-C<sub>5</sub>-alenoxy,  
R<sup>2</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,  
R<sup>3</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,  
R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl, or  
the moiety represented below by P, Q, S or T.

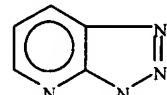
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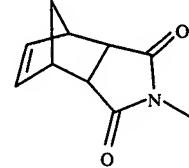
(P)



(Q)



(S)



(T)

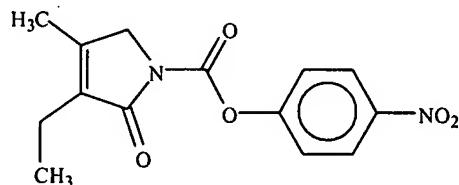
36) (new) The process as claimed in claim 35 wherein the compound of formula 4 is further reacted with trans-4-methylcyclohexyl isocyanate to obtain the compound of formula 1.

37) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2, is carried out in presence of an organic base and optionally an acid scavenger compound.

38) (new) The process as claimed in claim 32 comprising,

a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,

wherein Z is O and R is 4-nitrophenyl, to obtain a compound of formula 3a,



Formula 3a

5 b) reacting the compound of formula 3a with 4-(2-Aminoethyl)benzene sulfonamide to obtain 4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzenesulfonamide, a compound of formula 4,

c) and further reacting the compound of formula 4 with *trans*-4-methylcyclohexyl isocyanate to obtain the compound of formula 1.

10 39) (new) The process as claimed in claim 37 wherein the organic base is selected from the group consisting of 4-dimethylaminopyridine; 4-pyrrolidinopyridine; diisopropylethylamine, tetramethylguanidine; 1,8-diazabicyclo[5.4.0]undec-7-ene; 1,5-diazabicyclo [4.3.0] non-5-ene; 2,6-lutidine and picolines.

40) (new) The process as claimed in claim 37 wherein the acid scavenger compound is selected from the group consisting of trialkylamines, pyridine, sodium carbonate and potassium carbonate.

15 41) (new) The process as claimed in claim 37 wherein the organic base is 4-dimethylaminopyridine and the acid scavenger compound is triethylamine.

42) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2 is carried out in presence of a solvent selected from the group consisting of aliphatic or aromatic hydrocarbons, ethers, nitriles and amides.

43) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2 is carried out in a chlorinated hydrocarbon solvent.

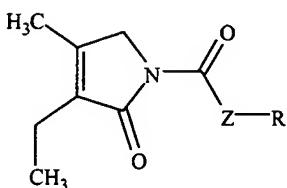
44) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2 is carried out at a temperature between the range of about 0°C to about 35°C for about 8 to about 15 hours.

10 45) (new) The process as claimed in claim 38 wherein a compound of formula 3a is obtained in a purity of greater than 99%.

46) (new) The process as claimed in claim 38 wherein a compound of formula 4 is obtained in a purity of greater than 99%.

15 47) (new) The process as claimed in claim 38 wherein a compound of formula 1 is obtained in a purity of greater than 99%.

48) (new) The intermediate compound of formula 3,



**Formula 3**

wherein,

Z is O, S or NY, wherein Y is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl, aryl or aralkyl, and

R is aryl or heteroaryl, where aryl or heteroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R<sup>1</sup>, SR<sup>2</sup>, SO-R<sup>3</sup> and SO<sub>2</sub>-R<sup>4</sup>,

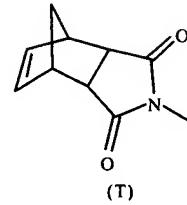
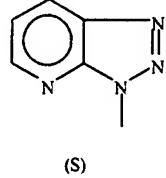
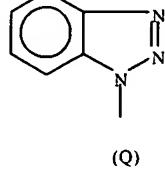
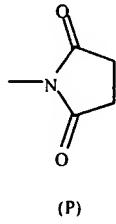
R<sup>1</sup> is H, C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-alkoxy or C<sub>2</sub>-C<sub>5</sub>-alenoxy,

R<sup>2</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

R<sup>3</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl,

R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkenyl, C<sub>2</sub>-C<sub>5</sub>-alkynyl, C<sub>1</sub>-C<sub>5</sub>-haloalkyl or C<sub>2</sub>-C<sub>5</sub>-haloalkenyl, or

10 the moiety represented below by P, Q, S or T.



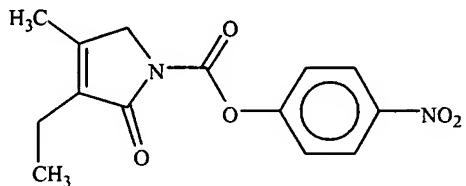
49) (new) The intermediate compound of formula 3, as claimed in claim 48 wherein Z is O and R is aryl or the moiety represented by (P), (Q), (S) or (T), characterised in that aryl is phenyl substituted with one or more radicals selected from nitro, halo, cyano, 4-trifluoroalkyl, 2,4-bis(trifluoroalkyl) or 2,6-bis(trifluoroalkyl).

15

50) (new) The intermediate compound of formula 3, as claimed in claim 48, wherein Z is O and R is selected from phenyl substituted with 4-nitro, 2,4-dinitro, 2,6-dinitro, 4-halo,

2,4-dihalo, 2,6-dihalo, 4-trifluoromethyl, 2,4-bis(trifluoromethyl) or 2,6-bis(trifluoromethyl).

51) (new) The intermediate compound of formula 3a:



5

**Formula 3a**

52) (new) The compound as claimed in claim 51 having a purity greater than 99%.

10